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AEDER, SEAN E	
ART UNIT	**PAPER NUMBER**
1642	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/558,543	DUAN ET AL.	
	Examiner	Art Unit	
	Sean E. Aeder	1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,8,9,20,22,24-26,29-31,45,46,48,51,53,68,70,74,76,84,89 and 95* is/are pending in the application.

4a) Of the above claim(s) *1,8,9,53,68,70,74,76,84 and 89* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20,22,24-26,30,31,45,48,51 and 95* is/are rejected.

7)☒ Claim(s) *29 and 46* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/21/07; 3/3/06*.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Election/Restriction

In the Response filed 11/5/07, Applicant did not elect a group as outlined in the Restriction Requirement of 9/21/07. However, Applicant stated that claims 24-26, 29, 30, 31, 45, 46, 48, and 51 are elected with traverse.

The traversal is on the ground(s) that Applicant disagrees with Examiner's position that the antibodies of the present invention do not define a contribution over the prior art of Macina (WO 00/20640). The Response further states that Applicant disagrees with the groups set-forth in the Restriction Requirement of 9/21/07 and proposes new groupings for the claims outlined in groups III and IV. This is not found persuasive. In regards to the arguments that the antibodies of the present invention define a contribution over the prior art, the technical feature linking groups I-VI appear to be that they all relate to the special technical feature of an antibody that specifically binds a mammalian Cln101. However, Macina (WO 00/20640; 4/13/00) teaches an antibody that specifically binds a mammalian Cln101 (see claim 7 of Macina in view of page 17 of the instant specification). Therefore, the technical feature linking the inventions of groups I-VI does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art. Accordingly, groups I-VI are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept. In regards to statements that Applicant disagrees with the groups set-forth in the Restriction Requirement of 9/21/07 and proposed new groupings for the claims outlined in groups III and IV, the Examiner spoke to

Kathleen Tyrrell on 9/21/07 and it was agreed that Applicant elects group III rejoined with group IV and that all other groups will remain as set-forth in the Restriction Requirement of 9/21/07.

Claims 1, 8, 9, 20, 22, 24-26, 29-31, 45, 46, 48, 51, 53, 68, 70, 74, 76, 84, 89, and 95 are pending.

Claims 1, 8, 9, 53, 68, 70, 74, 76, 84, and 89 are withdrawn from further consideration by the examiner under 37 CFR 1.142(b) as being drawn to a non-elected invention.

Claims 20, 22, 24-26, 29-31, 45, 46, 48, 51, and 95 are currently under consideration.

Deposit of Biological Material

It is noted that the hybridomas of ATCC accession number PTA-5877 and PTA-5876 have been deposited under the Budapest Treaty and that the biological materials will be irrevocably and without restriction or condition released to the public upon the issuance of a patent (see page 101 of the instant specification, in particular).

Claim Objections

Claims 29 and 46 are objected to for being dependent upon rejected claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 45 is rejected under 35 U.S.C. 101 because claim 45, as written, does not sufficiently distinguish over cells that naturally exist because the claims do not particularly point out any non-naturally occurring differences between the claimed products and the naturally occurring products. For instance, claim 45 encompasses cells that naturally produces antibody fragments that bind to mammalian Cln101. In the absence of the hand of man, the naturally occurring products are considered non-statutory subject matter. *See Diamond v. Chakrabarty*, 447 U.S. 303, 206 USPQ 193 (1980). The claim should be amended to indicate the hand of the inventor, e.g., by insertion of "Isolated" or "Purified". See MPEP 2105.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 30 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the

time the application was filed, had possession of the claimed invention. In the instant case, the claims are inclusive of a genus of antibodies that compete for binding to the same epitope as the epitope bound by the monoclonal antibody produced by a hybridoma selected from the group consisting of ATCC accession number PTA-5877 and PTA-5876 (see claim 30). However, the specification does not identify the specific epitopes bound by the monoclonal antibodies produced by the hybridomas of ATCC accession number PTA-5877 or PTA-5876. Further, the specification does not disclose, and the art does not teach, a genus of antibodies that compete for binding to the same epitope as the epitope bound by the monoclonal antibody produced by a hybridoma selected from the group consisting of ATCC accession number PTA-5877 and PTA-5876.

A description of a genus may be achieved by means of a recitation of a representative number of species falling within the scope of the genus or by describing structural features common to that genus that "constitute a substantial portion of the genus." See University of California v. Eli Lilly and Co., 119 F.3d 1559, 1568, 43 USPQ2d 1398, 1406 (Fed. Cir. 1997): "A description of a genus of cDNAs may be achieved by means of a recitation of a representative number of cDNA, defined by nucleotide sequence, falling within the scope of the genus or of a recitation of structural features common to the members of the genus, which features constitute a substantial portion of the genus."

Further, in regards to claims to a product defined by function, without a correlation between structure and function, the claim does little more than define the claimed invention by function. That is not sufficient to satisfy the written

description requirement. See Eli Lilly, 119 at1568 USPQ2d at 1406 ("definition by function...does not suffice to define the genus because it is only an indication of what the gene does, rather than what it is").

The court has since clarified that this standard applies to compounds other than cDNAs. See University of Rochester v. G.D. Searle & Co., Inc., F.3d, 2004 WL 260813, at *9 (Fed.Cir.Feb. 13, 2004). The instant specification fails to provide sufficient descriptive information, such as definitive structural or functional features that are common to the genus. That is, the specification provides neither a representative number of antibodies that encompass the genus nor does it provide a description of structural features that are common to the antibodies. Since the disclosure fails to describe common attributes or characteristics that identify members of the genus, and because the genus is highly variant, the disclosure of hybridomas of ATCC accession number PTA-5877 and PTA-5876 is insufficient to describe the genus. Thus, one of skill in the art would reasonably conclude that the disclosure fails to provide a representative number of species to describe and enable the genus as broadly claimed.

Vas-Cath Inc. v. Mahurkar, 19USPQ2d 1111, clearly states "applicant must convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession *of the invention*. The invention is, for purposes of the 'written description' inquiry, *whatever is now claimed.*" (See page 1117.) The specification does not "clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed." (See *Vas-Cath* at

page 1116). As discussed above, even though Applicant proposes methods of screening for possible members of the genus (page 61, in particular), the skilled artisan cannot envision the detailed chemical structure of the encompassed genus, and therefore conception is not achieved until reduction to practice has occurred, regardless of the complexity or simplicity of the method of isolation. Adequate written description requires more than a mere statement that it is part of the invention and reference to a potential method of isolation. The compound itself is required. See *Fiers v. Revel*, 25 USPQ2d 1601 at 1606 (CAFC 1993) and *Amgen Inc. v. Chugai Pharmaceutical Co. Ltd.*, 18 USPQ2d 1016.

One cannot describe what one has not conceived. See *Fiddes v. Baird*, 30 USPQ2d 1481 at 1483. In *Fiddes*, claims directed to mammalian FGF's were found to be unpatentable due to lack of written description for that broad class. The specification provided only the bovine sequence. Applicant is reminded that *Vas-Cath* makes clear that the written description provision of 35 U.S.C. §112 is severable from its enablement provision (see page 1115).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 20, 24, 26, 31, 45, 48, and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Soppet and Dillon (US Patent 5,861,494; 1/19/99).

Claim 20 is drawn to a kit for diagnosing a patient's susceptibility to prostate cancer or ovarian cancer comprising a suitable assay for measuring Cln101 levels wherein the levels of Cln101 are determined. Claim 24 is drawn to an isolated Cln101 antibody that binds to mammalian Cln101 in vivo or in vitro. Claim 26 is drawn to the antibody of claim 24 which is a monoclonal antibody, an antibody fragment or a chimeric or a humanized antibody. Claim 31 is drawn to the antibody of claim 24 which is conjugated to a growth inhibitory agent or a cytotoxic agent. Claim 45 is drawn to a cell that produces the antibody of claim 26. Claim 48 is drawn to a composition comprising the antibody of claim 24 and a carrier. Claim 51 is drawn to the composition of claim 48, wherein the antibody is a human or humanized antibody and the carrier is a pharmaceutical carrier.

It is noted that Soppet and Dillon refers to Cln101 as "SEQ ID NO:2" (see line 30 on page 17 of the instant specification or compare SEQ ID NO:2 with instant SEQ ID NO:1). Soppet and Dillon further teaches a kit comprising an isolated Cln101 antibody, generated against the full sequence or a partial sequence of Cln101, that binds to mammalian Cln101 in vivo or in vitro (see lines 32-45 of column 9, in particular). Soppet and Dillon further teaches said antibody

as a monoclonal antibody, an antibody fragment or a chimeric or a humanized antibody (see lines 47-65 of column 19, in particular). Soppet and Dillon further teaches said antibody conjugated to a growth inhibitory agent or a cytotoxic agent (lines 31-40 of column 9, in particular). Soppet and Dillon further teaches a cell that produces said antibody (see paragraph spanning columns 19 and 20, in particular). Soppet and Dillon further teaches a composition comprising said antibody and a carrier (see lines 1-3 of column 16, in particular). Soppet and Dillon further teaches a composition wherein the antibody is a human or humanized antibody and the carrier is a pharmaceutical carrier (lines 51-53 of column 19 and lines 1-3 of column 16, in particular).

In regards to instant claim 20, the antibodies taught by Soppet and Dillon are a kit for diagnosing a patient's susceptibility to prostate cancer or ovarian cancer comprising a suitable assay for measuring Cln101 levels wherein the levels of Cln101 are determined. It is noted that statements of intended purposes or uses are not considered limitations because they merely state an intended use of the invention rather than any distinct definition of any of the claimed invention's limitations (see Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999)). Thus, recitation of statements describing the claimed product as a product which is intended to diagnose a patient's susceptibility to prostate cancer or ovarian cancer are not given patentable weight and are not limitations to the claims.

Claims 20, 24, 26, 31, 45, 48, 51, and 95 are rejected under 35 U.S.C. 102(e) as being anticipated by Schlegel et al (US 2003/0108963 A1; 6/12/03).

Claims 20, 24, 26, 31, 45, 48, and 51 are discussed above. Claim 95 is drawn to the kit of claim 20 for diagnosing a patient's susceptibility to prostate cancer further comprising a suitable assay for measuring Prostate Specific Antigen (PSA) levels wherein the levels of both PSA and Cln101 are determined.

It is noted that Schlegel et al refers to Cln101 as "REG-IV" (see Table 1 of Schlegel et al and line 6 on page 18 of the instant specification, which discloses that Cln101 is referred to as REG-IV in the art). Schlegel et al further teaches a kit comprising an isolated Cln101 antibody that binds to mammalian Cln101 in vivo or in vitro (see paragraphs 58 and 113-115, in particular). Schlegel et al further teaches said antibody as a monoclonal antibody, an antibody fragment or a chimeric or a humanized antibody (see paragraph 90, in particular). Schlegel et al further teaches said antibody conjugated to a growth inhibitory agent or a cytotoxic agent (see paragraph 193, in particular). Schlegel et al further teaches a cell that produces said antibody (see paragraph 57, in particular). Schlegel further teaches a composition comprising said antibody and a carrier (see paragraph 197, in particular). Schlegel et al further teaches a composition wherein the antibody is a human or humanized antibody and the carrier is a pharmaceutical carrier (see paragraph 90 and 197, in particular). Schlegel et al further teaches said Cln101 antibody as part of a kit comprising antibodies that

bind PSA to diagnose prostate cancer (see paragraphs 7, 58, 56, and 113-115, in particular).

In regards to instant claim 20 and 95, the kit comprising antibodies that bind Cln101 and antibodies that bind PSA taught by Schlegel et al is a kit for diagnosing a patient's susceptibility to prostate cancer comprising a suitable assay for measuring Cln101 levels wherein the levels of Cln101 are determined and further comprising a suitable assay for measuring Prostate Specific Antigen (PSA) levels wherein the levels of both PSA and Cln101 are determined. It is noted that statements of intended purposes or uses are not considered limitations because they merely state an intended use of the invention rather than any distinct definition of any of the claimed invention's limitations (see Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999)). Thus, recitation of statements describing the claimed product as a product which is intended to diagnose a patient's susceptibility to prostate cancer are not given patentable weight and are not limitations to the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soppet and Dillon (US Patent 5,861,494; 1/19/99) as applied to claim 20 above, and further in view of Sakamoto et al (Gut, March 1987, 28: 323-329).

The teaching of claim 20 by Soppet and Dillon is discussed above. Soppet and Dillon further teaches antibodies that specifically bind Cln101 would be used to detect metastatic colon cancer cells and diagnose metastatic colon cancer (see lines 31-37 of column 2, in particular).

Soppet and Dillon does not specifically teach a kit for diagnosing a patient's susceptibility to ovarian cancer comprising a suitable assay for measuring Cln101 levels wherein the levels of Cln101 are determined, further comprising a suitable assay for measuring CA125 levels wherein the levels of

both CA125 and Cln101 are determined (claim 22). However, this deficiency is made up in the teachings of Sakamoto et al.

Sakamoto et al teaches a method comprising diagnosing metastatic colon cancer by using a kit comprising an antibody that specifically binds CA125 to determine levels of CA125 in patient serum (see Table 1, in particular). Sakamoto et al further teaches that combining detection of CA125 with detection of other makers for metastatic colon cancer yielded higher sensitivities than by using a single marker (see left column of page 328, in particular).

One of ordinary skill in the art at the time the invention was made would have been motivated to produce a kit comprising antibodies that bind Cln101 and antibodies that bind CA125 because Soppet and Dillon teaches a kit comprising antibodies that specifically bind Cln101 to diagnose metastatic colon cancer (see lines 31-37 of column 2, in particular), Sakamoto et al teaches a kit comprising an antibody that specifically binds CA125 to diagnose metastatic colon cancer (see Table 1, in particular), and one of skill in the art would recognize that a kit with antibodies that detect both Cln101 and CA125 would be more sensitive than a kit that detects either marker alone. One of ordinary skill in the art at the time the invention was made would have had a reasonable expectation of success for combining the kit taught by Soppet and Dillon with the kit taught by Sakamoto because Soppet and Dillon and Sakamoto teach antibodies that specifically bind Cln101 and CA125, respectively. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results.

It is further noted that the kit comprising antibodies taught by the combined teachings of Soppet and Dillon and Sakamoto is a kit for diagnosing a patient's susceptibility to ovarian cancer comprising a suitable assay for measuring Cln101 levels wherein the levels of Cln101 are determined, further comprising a suitable assay for measuring CA125 levels wherein the levels of both CA125 and Cln101 are determined. It is noted that statements of intended purposes or uses are not considered limitations because they merely state an intended use of the invention rather than any distinct definition of any of the claimed invention's limitations (see Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999)). Thus, recitation of statements describing the claimed product as a product which is intended to diagnose a patient's susceptibility to ovarian cancer are not given patentable weight and are not limitations to the claims.

Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soppet and Dillon (US Patent 5,861,494; 1/19/99) as applied to claim 24 above, and further in view of Casalini et al (Cancer Immunol Immunother, July 1993, 37:54-60).

The teaching of claim 24 by Soppet and Dillon is discussed above. Soppet and Dillon further teaches antibodies that specifically bind Cln101 would be used for in vivo imaging to detect metastatic colon cancer cells and treat metastatic colon cancer in vivo when conjugated to reagents that destroy colon

cancer cells or when conjugated to detectable labels, respectively (see lines 31-52 of column 9, in particular).

Soppet and Dillon does not specifically teach that the Cln101 antibodies would internalize upon binding to Cln101 on a mammalian cell in vivo (see claim 25). However, this deficiency is made up in the teachings of Casalini et al.

Casalini et al teaches methods of evaluating the ability of conjugated antibodies to internalize upon binding antigen on a mammalian cell (page 55, in particular). Casalini et al further teaches that conjugated antibodies that internalize upon binding antigen on a mammalian cell are preferable to those conjugated antibodies that do not internalize because those antibodies that internalize exhibit more therapeutic potential (see right column of page 58, in particular).

One of ordinary skill in the art at the time the invention was made would have been motivated to screen Cln101 antibodies taught by Soppet and Dillon to obtain antibodies that would internalize upon binding to Cln101 on a mammalian cell in vivo because Soppet and Dillon teaches said antibodies are to treat mammalian colon cancer cells in vivo and Casalini et al teaches that antibodies that internalize upon binding antigen on a mammalian cell are preferable to those antibodies that do not internalize because those antibodies that internalize exhibit more therapeutic potential (see right column of page 58, in particular). Further, one of skill in the art would recognize that Cln101 antibodies that internalize upon binding Cln101 on a mammalian cell would be more effective at in vivo imaging of metastatic colon cancer cells because internalized Cln101 antibodies

conjugated to a label would produce a more focused signal than antibodies which do not internalize. One of ordinary skill in the art at the time the invention was made would have had a reasonable expectation of success for obtaining Cln101 antibodies that internalize upon binding to Cln101 on a mammalian cell in vivo because Soppet and Dillon teaches Cln101 antibodies (see lines 32-45 of column 9, in particular) and Casalini et al teaches a method that would identify Cln101 antibodies that internalize upon binding to Cln101 on a mammalian cell in vivo (page 55, in particular). Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results.

Allowable Subject Matter

Claims 29 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Summary

Claims 20, 22, 24-26, 30, 31, 45, 48, 51, and 95 are rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E. Aeder, Ph.D. whose telephone

number is 571-272-8787. The examiner can normally be reached on M-F: 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Helms can be reached on 571-272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEA